CLAIMS

1. Decoding method of a picture sequence coded with spatial and temporal scalability, the coded data comprising motion information, comprising a hierarchical temporal synthesis step (16) carrying out a motion compensated temporal filtering, or MCTF, of pictures at a frequency decomposition level, from the said motion information, to provide pictures at a lower decomposition level, characterized in that, during a motion compensated temporal filtering operation, the resolution chosen for the use of the motion information and the complexity of the interpolation filters used depend on a decoding scenario, namely spatial and temporal resolutions and the bit-rate selected for the decoding or else the corresponding temporal decomposition level or a combination of these parameters.

2. Method according to claim 1, characterized in that the number of coefficients of the interpolation filter (16) used for the motion compensation depends on the decoding scenario or the temporal decomposition level.

3. Method according to claim 1, characterized in that the hierarchical temporal synthesis step (16) is a decoding of wavelet coefficients with motion compensated filtering.

4. Coding method of a picture sequence of a given spatial resolution, with spatial and temporal scalability, comprising a hierarchical temporal analysis step (4) carrying out a motion compensated temporal filtering, or MCTF, of pictures at a frequency decomposition level, from motion information between these pictures (7), to provide pictures at a higher decomposition level, characterized in that, during a motion compensated temporal filtering operation (4), the resolution chosen for the use of the said motion information and the complexity of the interpolation filters used (9) depends upon the said spatial resolution of the source pictures or the corresponding temporal decomposition level.

5. Method according to claim 4, characterized in that it comprises a step of motion estimation (7) computed between two pictures at a given level of decomposition to perform the motion compensation (4) and in that the

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computation accuracy of the motion estimation (7) depends on the temporal decomposition level or the said spatial resolution of the source pictures.

6. Method according to claim 4, characterized in that the hierarchical temporal analysis step (4) is a wavelet coding with motion compensated filtering.

7. Decoder for the implementation of the method according to claim 1, characterized in that it comprises a motion configuration choice circuit (16) to determine the motion resolution and the interpolation filter to use in the motion compensation (16) for the motion compensated filtering, depending on the decoding scenario, namely the spatial and temporal resolutions and the bit-rate selected for the decoding or the corresponding temporal decomposition level or a combination of these parameters.

8. Coder for the implementation of the method according to claim 4, characterized in that it comprises a motion configuration choice circuit (4) to determine the interpolation filter to be used by the temporal analysis circuit for the motion compensation (4) depending on the said spatial resolution of the source pictures or the corresponding temporal decomposition level.

9. Coder for the implementation of the method according to claim 4, characterized in that it comprises a motion configuration choice circuit (7) to determine the accuracy of the motion computed by the motion estimation circuit (7) depending on the said spatial resolution of the source pictures or of the corresponding temporal decomposition level.